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Subject: FYI - OST webinar on NNC for Illinois River
[NNCWebinar-June 2017 OK-AR.pdf](#)

Here is the slide deck. Bottom line:

Summary

- Nuisance algae, specifically *Cladophora*, is very likely to bloom when surface-water TP averages > 0.035 mg/L TP during critical flow conditions.
- Critical flow TP is a very strong predictor of all-flow TP, but allflow TP averages 2-3x higher than critical flow. Criterion assessment is much easier and defensible using critical flow data.
- Nitrogen is important because it also has to be available for blooms to occur, but it is in much higher supply than P, thus P was controlling blooms



Implications for other studies

- Gradient design with minimal confounding factors is needed to identify nutrient thresholds. I cannot emphasize this enough! Large substrates! Open canopy (no more than 50% cover) broken water. Very similar flow regimes.
- Nuisance algal blooms resonate as “problem” with managers/public much more than changes in diatom metrics, etc., but require repeated sampling to “catch” them.
- Existing monitoring data may be helpful, but typically not collected for this purpose and too noisy/confounded to use, why so many states struggle to identify relationships.

